ABSTRACT OF THE DISCLOSURE

Disclosed is a method for providing reliability for unicast and multicast transmission of connectionless-oriented UDP packets over shared media, independently from applications relating to the transmission. The method includes the steps of periodically transferring from a transmitting side of data packets an SR packet, which includes information representing transmission data packets; determining if the data packets are lost depending on information of the SR packet if a receiving side of the data packets receives the SR packet from the transmitting side of the data packets, and transferring to the transmitting side of the data packets an RR packet, which includes information about a received data packet; periodically transferring an NACK packet, which includes information about the received data packet, if lost packets exist after the receiving side of the data packets periodically polls a receiver window; and transferring to the receiving side of the data packets an NACKR packet, which includes the lost data packets depending on information of the NACK packet, if the transmitting side of the data packets receives the NACK packet from the receiving side of the data packets.